

# Statement of Basis of the Federal Operating Permit

Equistar Chemicals, LP

Site/Area Name: Bayport Plant  
Physical location: 12001 Bay Area Blvd  
Nearest City: Pasadena  
County: Harris

Permit Number: O1419  
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2821  
SIC Name: Plastics Materials

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

- A description of the facility/area process description;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: April 29, 2014

## **Operating Permit Basis of Determination**

### **Permit Area Process Description**

The Equistar Chemicals - Bayport Plant consists of four polypropylene manufacturing units and associated extrusion units. The four units are HPP-3 (C-line), HPP-4 (D-Line), HPP-5 (E-Line), and HPP-6 (Catalloy). They are operating under permits R09423 and R-19546, respectively.

HPP3 and HPP4 produces homopolymers, HPP5 produces homopolymers and copolymers, whereas catalloy produces homopolymers, copolymers and terpolymers for specialty applications.

Hydrocarbons used in the first three units consist of propylene, ethylene, and propane. Catalloy uses those chemicals as raw material and butene in addition. Liquid propylene is tied into the common propylene feed system (via pipeline) for the Bayport Plant, and stored into storage bullets. The propylene is then passed through a closed poison control system containing two pressurized fixed bed columns.

Butene is unloaded from trucks into a storage tank. Butene is sent through a drying section and then to a storage tank. From the tank, butene is pumped to the polymerization section.

Propane is recovered and recycled from the HPP-5 unit or unloaded from railcars or trucks into a storage tank.

All process vents are controlled by the flare system. The fugitive emissions are monitored using 28MID program. The pumps and compressors are equipped with double mechanical seal with a high pressure seal oil barrier fluid or double mechanical seal with vent to the flare system.

Two flares serve the three units HPP-3, 4 and 5 (EPN FL-34 and FL-30) and Flare (FL-42) as a back-up, whereas Flare (FL-81) serves the Catalloy unit.

### **FOPs at Site**

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

### **Major Source Pollutants**

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, CO
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### **Reading State of Texas’s Federal Operating Permit**

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list

## General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

## Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

## Attachments

**Applicable Requirements Summary.** The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

**Additional Monitoring Requirement.** The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

**Permit Shield.** A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

**New Source Review Authorization References.** All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

**Compliance Plan.** A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

**Alternative Requirements.** This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

## Appendix A

**Acronym list.** This attachment lists the common acronyms used when discussing the FOPs.

**Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions**

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A. for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

**Federal Regulatory Applicability Determinations**

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

<b>Regulatory Program</b>	<b>Applicability (Yes/No)</b>
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	No
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

### **Basis for Applying Permit Shields**

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

### **Insignificant Activities**

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).

11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

### **Determination of Applicable Requirements**

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [www.tceq.texas.gov/permitting/air/nav/air\\_all\\_ua\\_forms.html](http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html).

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [www.tceq.texas.gov/permitting/air/nav/air\\_supportsys.html](http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html). The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes

indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column “Changes and Exceptions to RRT.” If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word “None” will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled “Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected.”

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

#### Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.



## Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
GRPCLNTKVT	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a submerged fill pipe</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons</p>
GRPCLNTKVT	40 CFR Part 60, Subpart Kb	60Kb-01	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia</p>
GRPOILLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5121-01	<p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only loading.</p> <p>True Vapor Pressure = True vapor pressure less than 0.5 psia.</p>
MIN OIL UNLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5212-01	<p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only unloading.</p> <p>True Vapor Pressure = True vapor pressure less than 0.5 psia.</p>
30	30 TAC Chapter 111, Visible Emissions	R1111-01	<p>ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used under conditions other than emergency or upset conditions.</p> <p>ALTERNATE OPACITY LIMITATION [REG I] = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>CONSTRUCTION DATE (NEWEST SOURCE ROUTING TO FLARE) [REG I] = Newest source routing emissions to the flare began construction after January 31, 1972.</p>
30	40 CFR Part 60, Subpart A	60A-01	<p>SUBJECT TO 40 CFR 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>ADHERING TO HEAT CONTENT SPECIFICATIONS = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>FLARE ASSIST TYPE [NSPS A, NESHAP A, AND/OR MACT A] = Air-assisted</p>
34	30 TAC Chapter 111, Visible Emissions	R1111-01	<p>ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used under conditions other than emergency or upset conditions.</p> <p>ALTERNATE OPACITY LIMITATION [REG I] = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>CONSTRUCTION DATE (NEWEST SOURCE ROUTING TO FLARE) [REG I] = Newest source routing emissions to the flare began construction</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			after January 31, 1972.
34	40 CFR Part 60, Subpart A	60A-01	<p>SUBJECT TO 40 CFR 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>ADHERING TO HEAT CONTENT SPECIFICATIONS = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>FLARE ASSIST TYPE [NSPS A, NESHAP A, AND/OR MACT A] = Steam-assisted</p> <p>FLARE EXIT VELOCITY [NSPS A, NESHAP A, AND/OR MACT A] = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).</p> <p>HEATING VALUE OF GAS [NSPS A, NESHAP A, AND/OR MACT A] = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)</p>
42	30 TAC Chapter 111, Visible Emissions	GROUND FLARE	<p>ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used only under emergency or upset conditions.</p> <p>ALTERNATE OPACITY LIMITATION [REG I] = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>CONSTRUCTION DATE (NEWEST SOURCE ROUTING TO FLARE) [REG I] = Newest source routing emissions to the flare began construction after January 31, 1972.</p>
42	40 CFR Part 60, Subpart A	GROUND FLARE	SUBJECT TO 40 CFR 60.18 = Flare is not subject to 40 CFR § 60.18.
81	30 TAC Chapter 111, Visible Emissions	R1111-01	<p>ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used under conditions other than emergency or upset conditions.</p> <p>ALTERNATE OPACITY LIMITATION [REG I] = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>CONSTRUCTION DATE (NEWEST SOURCE ROUTING TO FLARE) [REG I] = Newest source routing emissions to the flare began construction after January 31, 1972.</p>
81	40 CFR Part 60, Subpart A	60A-01	<p>SUBJECT TO 40 CFR 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>ADHERING TO HEAT CONTENT SPECIFICATIONS = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>FLARE ASSIST TYPE [NSPS A, NESHAP A, AND/OR MACT A] = Steam-assisted</p> <p>FLARE EXIT VELOCITY [NSPS A, NESHAP A, AND/OR MACT A] = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).</p> <p>HEATING VALUE OF GAS [NSPS A, NESHAP A, AND/OR MACT A] = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)</p>
GRPHPPFUG	30 TAC Chapter 115, HRVOC Fugitive Emissions	R5780-01	<p>Agitators = The fugitive unit contains agitators.</p> <p>Alternative Work Practice in § 115.358 = No components are complying with the alternative work practice requirements in 30 TAC § 115.358.</p> <p>Compressor Seals = The fugitive unit contains compressor seals.</p> <p>Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines.</p> <p>Process Drains = The fugitive unit contains process drains.</p> <p>Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC.</p> <p>Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves.</p> <p>ACR = No agitators are complying with an alternate control requirement.</p> <p>Less Than 250 Components at Site = The fugitive unit is located at a site with at least 250 fugitive components in VOC service.</p> <p>Weight Percent HRVOC = All components contact only a process fluid that contains at least 5.0% HRVOC by weight on an annual average basis.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Complying with § 115.781(b)(9) = Agitators are complying with the requirements of § 115.781(b)(9).</p> <p>Pumps with Shaft Seal System = Pumps are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.</p> <p>Bypass Line Valves = The fugitive unit contains bypass line valves.</p> <p>Compressors with Shaft Seal System = Compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.</p> <p>Flanges or Other Connectors = The fugitive unit contains flanges or other connectors.</p> <p>Heat Exchanger Heads, etc. = The fugitive unit contains heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolter manways, hatches, sump covers, junction vent boxes or covers and seals on VOC water separators.</p> <p>Pressure Relief Valves = The fugitive unit contains pressure relief valves.</p> <p>Pump Seals = The fugitive unit contains pump seals.</p> <p>ACR = No heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolted manways, hatches, sump covers, junction box vents, or covers and seals on VOC water separators are complying with an alternate control requirement.</p> <p>Agitators with Shaft Seal System = No agitators are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.</p> <p>Complying with § 115.781(b)(9) = Heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolted manways, hatches, sump covers, junction box vents, or covers and seals on VOC water separators are complying with the requirements of § 115.781(b)(9).</p>
GRPHPPFUG	30 TAC Chapter 115, HRVOC Fugitive Emissions	R5780-02	<p>Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC.</p> <p>Less Than 250 Components at Site = The fugitive unit is located at a site with at least 250 fugitive components in VOC service.</p> <p>Weight Percent HRVOC = All components contact only a process fluid that contains less than 5.0% HRVOC by weight on an annual average basis.</p>
GRPHPPFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
GRPHPPFUG	40 CFR Part 60, Subpart DDD	60DDD-ALL	Owner/Operator Assumes VOC/TOC fugitive control requirements for all components subject to 40 CFR Part 60, Subpart DDD With no alternate control or control device
GRPHCOOL	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-01	<p>COOLING TOWER HEAT EXCHANGE SYSTEM EXEMPTIONS = The cooling tower heat exchange system does not qualify for an exemption.</p> <p>ALTERNATIVE MONITORING = Complying with the specified monitoring in 30 TAC § 115.764.</p> <p>DESIGN CAPACITY = Design capacity to circulate 8000 gpm or greater.</p> <p>FINITE VOLUME SYSTEM = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).</p> <p>MODIFIED MONITORING = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.</p> <p>FLOW MONITORING/TESTING METHOD = Choosing to monitor cooling water flow rate at a location representative of the total flow rate to the cooling tower in accordance with § 115.764(g)(2).</p> <p>TOTAL STRIPPABLE VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).</p> <p>ON-LINE MONITOR = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.</p>
142	30 TAC Chapter 115, HRVOC Vent Gas	R5720-1	<p>Alternative Monitoring = Not using alternative monitoring and testing methods.</p> <p>HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).</p> <p>Exempt Date = The vent gas stream is not exempt.</p> <p>Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Vent Gas Stream Control = Vent gas stream is uncontrolled.</p> <p>Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.</p> <p>Waived Testing = The executive director has not waived testing for identical vents.</p> <p>Testing Requirements = Meeting § 115.725(a).</p>
142	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
152	30 TAC Chapter 115, HRVOC Vent Gas	R5720	<p>Alternative Monitoring = Not using alternative monitoring and testing methods.</p> <p>HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft<sup>3</sup>/hr).</p> <p>Exempt Date = The vent gas stream is not exempt.</p> <p>Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.</p> <p>Vent Gas Stream Control = Vent gas stream is uncontrolled.</p> <p>Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.</p> <p>Waived Testing = The executive director waived testing for identical vents.</p> <p>Testing Requirements = Meeting § 115.725(a).</p>
152	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
FL-30VENTS	30 TAC Chapter 115, HRVOC Vent Gas	R5725-01	<p>HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft<sup>3</sup>/hr).</p> <p>Vent Gas Stream Control = Vent gas stream is controlled by a flare.</p>
FL-30VENTS	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg).
FL-34VENTS	30 TAC Chapter 115, HRVOC Vent Gas	R5725-01	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Vent Gas Stream Control = Vent gas stream is controlled by a flare.
FL-34VENTS	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg).
FL-81VENTS	30 TAC Chapter 115, HRVOC Vent Gas	R5725-01	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Vent Gas Stream Control = Vent gas stream is controlled by a flare.
FL-81VENTS	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg).
GRPCATDMVT	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
GRPCATTRNS	30 TAC Chapter 115, HRVOC Vent Gas	R5720	Alternative Monitoring = Not using alternative monitoring and testing methods. HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule. Vent Gas Stream Control = Vent gas stream is uncontrolled. Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities. Waived Testing = The executive director waived testing for identical vents. Testing Requirements = Meeting § 115.725(a).
GRPCATTRNS	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being

Unit ID	Regulation	Index Number	Basis of Determination*
			selected.
GRPCLNDMVT	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
GRPCLNTRNS	30 TAC Chapter 115, HRVOC Vent Gas	R5720	<p>Alternative Monitoring = Not using alternative monitoring and testing methods.</p> <p>HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).</p> <p>Exempt Date = The vent gas stream is not exempt.</p> <p>Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.</p> <p>Vent Gas Stream Control = Vent gas stream is uncontrolled.</p> <p>Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.</p> <p>Waived Testing = The executive director has not waived testing for identical vents.</p> <p>Testing Requirements = Meeting § 115.725(a).</p>
GRPCLNTRNS	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
GRPDNDMVT	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
GRPDNTRNS	30 TAC Chapter 115, HRVOC Vent Gas	R5720	<p>Alternative Monitoring = Not using alternative monitoring and testing methods.</p> <p>HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).</p> <p>Exempt Date = The vent gas stream is not exempt.</p> <p>Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.</p> <p>Vent Gas Stream Control = Vent gas stream is uncontrolled.</p> <p>Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Waived Testing = The executive director waived testing for identical vents.</p> <p>Testing Requirements = Meeting § 115.725(a).</p>
GRPDLNTRNS	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
GRPELNDMVT	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
GRPELNTRNS	30 TAC Chapter 115, HRVOC Vent Gas	R5720	<p>Alternative Monitoring = Not using alternative monitoring and testing methods.</p> <p>HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft<sup>3</sup>/hr).</p> <p>Exempt Date = The vent gas stream is not exempt.</p> <p>Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.</p> <p>Vent Gas Stream Control = Vent gas stream is uncontrolled.</p> <p>Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.</p> <p>Waived Testing = The executive director waived testing for identical vents.</p> <p>Testing Requirements = Meeting § 115.725(a).</p>
GRPELNTRNS	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
GRPSCRBRWW	30 TAC Chapter 115, HRVOC Vent Gas	R5720	<p>Alternative Monitoring = Not using alternative monitoring and testing methods.</p> <p>HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft<sup>3</sup>/hr).</p> <p>Exempt Date = The vent gas stream is not exempt.</p> <p>Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.</p> <p>Vent Gas Stream Control = Vent gas stream is uncontrolled.</p> <p>Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Waived Testing = The executive director has not waived testing for identical vents.</p> <p>Testing Requirements = Meeting § 115.725(a).</p>
PRO-CAT	40 CFR Part 60, Subpart DDD	60DDD-01	<p>CONTROL OF CONTINUOUS EMISSIONS [NSPS DDD] = ALL CONTINUOUS EMISSIONS ARE CONTROLLED IN AN EXISTING CONTROL DEVICE (AS DEFINED IN 40 CFR 60.561)</p> <p>EMERGENCY VENT [NSPS DDD] = EMISSIONS ARE NOT AN EMERGENCY VENT STREAM FROM A NEW MODIFIED OR RECONSTRUCTED FACILITY</p> <p>MANUFACTURED PRODUCT [NSPS DDD] = POLYPROPYLENE OR POLYETHYLENE</p> <p>POLYOLEFIN PRODUCTION [NSPS DDD] = MORE THAN ONE POLYOLEFIN IS PRODUCED</p> <p>CONTINUOUS CONTROL DEVICE [NSPS DDD] = FLARE</p> <p>CONTINUOUS PROCESS [NSPS DDD] = AFFECTED FACILITY PROCESS IS CONTINUOUS</p> <p>EXISTING CONTROL DEVICE [NSPS DDD] = VENT STREAM IS CONTROLLED NOT IN AN EXISTING CONTROL DEVICE (AS DEFINED IN 40 CFR 60.561) WHICH HAS NOT BEEN RECONSTRUCTED REPLACED OR ITS OPERATING CONDITIONS MODIFIED AS A RESULT OF STATE OR LOCAL REGULATIONS</p> <p>PROCESS EMISSIONS [NSPS DDD] = PROCESS CONTAINS VENT GAS STREAMS SOME OF WHICH EMIT CONTINUOUSLY AND SOME EMIT INTERMITTENTLY</p> <p>CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS DDD] = AFTER JANUARY 10 1989</p> <p>INTERMITTENT CONTROL DEVICE [NSPS DDD] = FLARE</p> <p>UNCONTROLLED ANNUAL EMISSIONS [NSPS DDD] = UNCONTROLLED ANNUAL EMISSIONS GREATER THAN OR EQUAL TO 1.6 MEGAGRAMS/YEAR (1.76 TONS/YEAR)</p> <p>ANNUAL EMISSIONS ENTERING CONTROL DEVICE [NSPS DDD] = ANNUAL EMISSIONS ENTERING CONTROL DEVICE GREATER THAN OR EQUAL TO CALCULATED THRESHOLD EMISSIONS (CTE) LEVELS CALCULATED IN 'TABLE 3'</p> <p>EXPERIMENTAL PROCESS LINE [NSPS DDD] = AFFECTED FACILITY IS NOT AN EXPERIMENTAL PROCESS LINE</p> <p>WEIGHT PERCENT TOTAL ORGANIC COMPOUNDS [NSPS DDD] = WEIGHT PERCENT TOTAL ORGANIC COMPOUNDS GREATER THAN OR EQUAL TO 0.10%</p> <p>MODIFIED AFTER APPLICATION DATE [NSPS DDD] = AFFECTED FACILITY NOT MODIFIED OR RECONSTRUCTED AFTER APPLICAILITY DATE</p> <p>'TABLE 2' THRESHOLD EMISSION RATES [NSPS DDD] = UNCONTROLLED EMISSION RATE GREATER THAN TO UNCONTROLLED THRESHOLD EMISSION RATES IN 'TABLE 2' OF 40 CFR 60.560</p>
PRO-CAT	40 CFR Part 60, Subpart DDD	60DDD-02	<p>CONTROL OF CONTINUOUS EMISSIONS [NSPS DDD] = ALL VENT GAS STREAMS ARE UNCONTROLLED</p> <p>EMERGENCY VENT [NSPS DDD] = EMISSIONS ARE NOT AN EMERGENCY VENT STREAM FROM A NEW MODIFIED OR RECONSTRUCTED FACILITY</p> <p>MANUFACTURED PRODUCT [NSPS DDD] = POLYPROPYLENE OR POLYETHYLENE</p> <p>POLYOLEFIN PRODUCTION [NSPS DDD] = MORE THAN ONE POLYOLEFIN IS PRODUCED</p> <p>CONTINUOUS PROCESS [NSPS DDD] = AFFECTED FACILITY PROCESS IS CONTINUOUS</p> <p>EXISTING CONTROL DEVICE [NSPS DDD] = VENT STREAM IS CONTROLLED NOT IN AN EXISTING CONTROL DEVICE (AS DEFINED IN 40 CFR 60.561) WHICH HAS NOT BEEN RECONSTRUCTED REPLACED OR ITS OPERATING CONDITIONS MODIFIED AS A RESULT OF STATE OR LOCAL REGULATIONS</p> <p>PROCESS EMISSIONS [NSPS DDD] = PROCESS CONTAINS VENT GAS STREAMS SOME OF WHICH EMIT CONTINUOUSLY AND SOME EMIT INTERMITTENTLY</p> <p>CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS DDD] = AFTER JANUARY 10 1989</p> <p>INTERMITTENT CONTROL DEVICE [NSPS DDD] = FLARE</p>



Unit ID	Regulation	Index Number	Basis of Determination*
			<p>UNCONTROLLED ANNUAL EMISSIONS [NSPS DDD] = UNCONTROLLED ANNUAL EMISSIONS LESS THAN 1.6 MEGAGRAMS/YEAR (1.76 TONS/YEAR)</p> <p>EXPERIMENTAL PROCESS LINE [NSPS DDD] = AFFECTED FACILITY IS NOT AN EXPERIMENTAL PROCESS LINE</p> <p>WEIGHT PERCENT TOTAL ORGANIC COMPOUNDS [NSPS DDD] = WEIGHT PERCENT TOTAL ORGANIC COMPOUNDS GREATER THAN OR EQUAL TO 0.10%</p> <p>MODIFIED AFTER APPLICATION DATE [NSPS DDD] = AFFECTED FACILITY NOT MODIFIED OR RECONSTRUCTED AFTER APPLICABILITY DATE</p> <p>'TABLE 2' THRESHOLD EMISSION RATES [NSPS DDD] = UNCONTROLLED EMISSION RATE LESS THAN OR EQUAL TO UNCONTROLLED THRESHOLD EMISSION RATES IN 'TABLE 2' OF 40 CFR 60.560</p>
PRO-CDE	40 CFR Part 60, Subpart DDD	60DDD-01	<p>CONTROL OF CONTINUOUS EMISSIONS [NSPS DDD] = ALL CONTINUOUS EMISSIONS ARE CONTROLLED IN AN EXISTING CONTROL DEVICE (AS DEFINED IN 40 CFR 60.561)</p> <p>EMERGENCY VENT [NSPS DDD] = EMISSIONS ARE NOT AN EMERGENCY VENT STREAM FROM A NEW MODIFIED OR RECONSTRUCTED FACILITY</p> <p>MANUFACTURED PRODUCT [NSPS DDD] = POLYPROPYLENE OR POLYETHYLENE</p> <p>POLYOLEFIN PRODUCTION [NSPS DDD] = MORE THAN ONE POLYOLEFIN IS PRODUCED</p> <p>CONTINUOUS CONTROL DEVICE [NSPS DDD] = FLARE</p> <p>CONTINUOUS PROCESS [NSPS DDD] = AFFECTED FACILITY PROCESS IS CONTINUOUS</p> <p>EXISTING CONTROL DEVICE [NSPS DDD] = VENT STREAM IS CONTROLLED NOT IN AN EXISTING CONTROL DEVICE (AS DEFINED IN 40 CFR 60.561) WHICH HAS NOT BEEN RECONSTRUCTED REPLACED OR ITS OPERATING CONDITIONS MODIFIED AS A RESULT OF STATE OR LOCAL REGULATIONS</p> <p>PROCESS EMISSIONS [NSPS DDD] = PROCESS CONTAINS VENT GAS STREAMS SOME OF WHICH EMIT CONTINUOUSLY AND SOME EMIT INTERMITTENTLY</p> <p>CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS DDD] = AFTER JANUARY 10 1989</p> <p>INTERMITTENT CONTROL DEVICE [NSPS DDD] = FLARE</p> <p>UNCONTROLLED ANNUAL EMISSIONS [NSPS DDD] = UNCONTROLLED ANNUAL EMISSIONS GREATER THAN OR EQUAL TO 1.6 MEGAGRAMS/YEAR (1.76 TONS/YEAR)</p> <p>ANNUAL EMISSIONS ENTERING CONTROL DEVICE [NSPS DDD] = ANNUAL EMISSIONS ENTERING CONTROL DEVICE GREATER THAN OR EQUAL TO CALCULATED THRESHOLD EMISSIONS (CTE) LEVELS CALCULATED IN 'TABLE 3'</p> <p>EXPERIMENTAL PROCESS LINE [NSPS DDD] = AFFECTED FACILITY IS NOT AN EXPERIMENTAL PROCESS LINE</p> <p>WEIGHT PERCENT TOTAL ORGANIC COMPOUNDS [NSPS DDD] = WEIGHT PERCENT TOTAL ORGANIC COMPOUNDS GREATER THAN OR EQUAL TO 0.10%</p> <p>MODIFIED AFTER APPLICATION DATE [NSPS DDD] = AFFECTED FACILITY NOT MODIFIED OR RECONSTRUCTED AFTER APPLICABILITY DATE</p> <p>'TABLE 2' THRESHOLD EMISSION RATES [NSPS DDD] = UNCONTROLLED EMISSION RATE GREATER THAN TO UNCONTROLLED THRESHOLD EMISSION RATES IN 'TABLE 2' OF 40 CFR 60.560</p>
PRO-CDE	40 CFR Part 60, Subpart DDD	60DDD-02	<p>CONTROL OF CONTINUOUS EMISSIONS [NSPS DDD] = ALL VENT GAS STREAMS ARE UNCONTROLLED</p> <p>EMERGENCY VENT [NSPS DDD] = EMISSIONS ARE NOT AN EMERGENCY VENT STREAM FROM A NEW MODIFIED OR RECONSTRUCTED FACILITY</p> <p>MANUFACTURED PRODUCT [NSPS DDD] = POLYPROPYLENE OR POLYETHYLENE</p> <p>POLYOLEFIN PRODUCTION [NSPS DDD] = MORE THAN ONE POLYOLEFIN IS PRODUCED</p> <p>CONTINUOUS PROCESS [NSPS DDD] = AFFECTED FACILITY PROCESS IS CONTINUOUS</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>EXISTING CONTROL DEVICE [NSPS DDD] = VENT STREAM IS CONTROLLED NOT IN AN EXISTING CONTROL DEVICE (AS DEFINED IN 40 CFR 60.561) WHICH HAS NOT BEEN RECONSTRUCTED REPLACED OR ITS OPERATING CONDITIONS MODIFIED AS A RESULT OF STATE OR LOCAL REGULATIONS</p> <p>PROCESS EMISSIONS [NSPS DDD] = PROCESS CONTAINS VENT GAS STREAMS SOME OF WHICH EMIT CONTINUOUSLY AND SOME EMIT INTERMITTENTLY</p> <p>CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE [NSPS DDD] = AFTER JANUARY 10 1989</p> <p>INTERMITTENT CONTROL DEVICE [NSPS DDD] = FLARE</p> <p>UNCONTROLLED ANNUAL EMISSIONS [NSPS DDD] = UNCONTROLLED ANNUAL EMISSIONS LESS THAN 1.6 MEGAGRAMS/YEAR (1.76 TONS/YEAR)</p> <p>EXPERIMENTAL PROCESS LINE [NSPS DDD] = AFFECTED FACILITY IS NOT AN EXPERIMENTAL PROCESS LINE</p> <p>WEIGHT PERCENT TOTAL ORGANIC COMPOUNDS [NSPS DDD] = WEIGHT PERCENT TOTAL ORGANIC COMPOUNDS GREATER THAN OR EQUAL TO 0.10%</p> <p>MODIFIED AFTER APPLICATION DATE [NSPS DDD] = AFFECTED FACILITY NOT MODIFIED OR RECONSTRUCTED AFTER APPLICAILITY DATE</p> <p>'TABLE 2' THRESHOLD EMISSION RATES [NSPS DDD] = UNCONTROLLED EMISSION RATE LESS THAN OR EQUAL TO UNCONTROLLED THRESHOLD EMISSION RATES IN 'TABLE 2' OF 40 CFR 60.560</p>

\* - The "unit attributes" or operating conditions that determine what requirements apply

## NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

## New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The

Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/old106list/index106.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html)

Outdated Standard Exemption lists may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/oldselist/se\\_index.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html)

<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 19546	Issuance Date: 08/18/2011
Authorization No.: 72217	Issuance Date: 02/19/2014
Authorization No.: 9423	Issuance Date: 12/29/2010
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.451	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.492	Version No./Date: 09/04/2000

Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 06/13/2001
Number: 106.532	Version No./Date: 09/04/2000

### **Emission Units and Emission Points**

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sandblasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

### **Monitoring Sufficiency**

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

### **Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected**

**Compliance Assurance Monitoring (CAM):**

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information	
ID No.: FL-30VENTS	
Control Device ID No.: 30	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Net Heating Value	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum Net Heating Value = 300 Btu/scf	
Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.	

Unit/Group/Process Information	
ID No.: FL-30VENTS	
Control Device ID No.: 30	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Inlet Flow Rate	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Maximum Velocity = 60 ft/sec	
<p>Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.</p>	

Unit/Group/Process Information	
ID No.: FL-30VENTS	
Control Device ID No.: 30	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: R5725-01
Pollutant: HIGHLY REACTIVE VOC	Main Standard: § 115.722(c)(1)
Monitoring Information	
Indicator: Inlet Flow Rate	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Maximum Velocity = 60 ft/sec	
<p>Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.</p>	

Unit/Group/Process Information	
ID No.: FL-30VENTS	
Control Device ID No.: 30	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: R5725-01
Pollutant: HIGHLY REACTIVE VOC	Main Standard: § 115.722(c)(1)
Monitoring Information	
Indicator: Net Heating Value	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum Net Heating Value = 300 Btu/scf	
<p>Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.</p>	

Unit/Group/Process Information	
ID No.: FL-34VENTS	
Control Device ID No.: 34	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Inlet Flow Rate	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Maximum Velocity = 60 ft/sec	
<p>Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.</p>	



Unit/Group/Process Information	
ID No.: FL-34VENTS	
Control Device ID No.: 34	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Net Heating Value	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum Net Heating Value = 300 Btu/scf	
<p>Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.</p>	

Unit/Group/Process Information	
ID No.: FL-34VENTS	
Control Device ID No.: 34	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: R5725-01
Pollutant: HIGHLY REACTIVE VOC	Main Standard: § 115.722(c)(1)
Monitoring Information	
Indicator: Inlet Flow Rate	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Maximum Velocity = 60 ft/sec	
<p>Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.</p>	

Unit/Group/Process Information	
ID No.: FL-34VENTS	
Control Device ID No.: 34	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: R5725-01
Pollutant: HIGHLY REACTIVE VOC	Main Standard: § 115.722(c)(1)
Monitoring Information	
Indicator: Net Heating Value	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum Net Heating Value = 300 Btu/scf	
<p>Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.</p>	

Unit/Group/Process Information	
ID No.: FL-81VENTS	
Control Device ID No.: 81	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Net Heating Value	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum Net Heating Value = 300 Btu/scf	
<p>Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.</p>	

Unit/Group/Process Information	
ID No.: FL-81VENTS	
Control Device ID No.: 81	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Inlet Flow Rate	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Maximum Velocity = 60 ft/sec	
<p>Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.</p>	

Unit/Group/Process Information	
ID No.: FL-81VENTS	
Control Device ID No.: 81	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: R5725-01
Pollutant: HIGHLY REACTIVE VOC	Main Standard: § 115.722(c)(1)
Monitoring Information	
Indicator: Inlet Flow Rate	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Maximum Velocity = 60 ft/sec	
<p>Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.</p>	

Unit/Group/Process Information	
ID No.: FL-81VENTS	
Control Device ID No.: 81	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, HRVOC Vent Gas	SOP Index No.: R5725-01
Pollutant: HIGHLY REACTIVE VOC	Main Standard: § 115.722(c)(1)
Monitoring Information	
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Averaging Period: one hour	
Deviation Limit: Minimum Net Heating Value = 300 Btu/scf	
Basis of CAM: A common way to monitor a flare is by measuring inlet flow rate and calculating the net heating value of emissions routed to the flare. If the flow rate is too high or if the net heating value is too low, the flare may not maintain a flame or properly combust emissions. Also, measuring the flow rate and net heating value is consistent with the calculation of the net heating value in 40 CFR Part 60, Subpart A. Utilizing the procedures in 40 CFR Part § 60.18(f)(3) to calculate the net heating value of the gaseous fuels is consistent with 40 CFR Part 60, Subpart A.	

### Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on 04/09/2014.
2. The compliance history review evaluated the period from 01/10/2008 to 01/10/2013.  
Site rating: 4.19 Company rating: 8.98  
(High < 0.10; Satisfactory > 0.10 and < 55; Unsatisfactory > 55)
3. Has the permit changed on the basis of the compliance history or site/company rating? .....No

### Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS? .....Yes
2. Is a compliance plan and schedule included in the permit? .....Yes

### Permit reviewer notes:

The applicant submitted a compliance plan and schedule for flares 30 and 34. The region reviewed and approved the schedule on April 3, 2014.

## **Available Unit Attribute Forms**

OP-UA1 - Miscellaneous and Generic Unit Attributes  
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes  
OP-UA3 - Storage Tank/Vessel Attributes  
OP-UA4 - Loading/Unloading Operations Attributes  
OP-UA5 - Process Heater/Furnace Attributes  
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes  
OP-UA7 - Flare Attributes  
OP-UA8 - Coal Preparation Plant Attributes  
OP-UA9 - Nonmetallic Mineral Process Plant Attributes  
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes  
OP-UA11 - Stationary Turbine Attributes  
OP-UA12 - Fugitive Emission Unit Attributes  
OP-UA13 - Industrial Process Cooling Tower Attributes  
OP-UA14 - Water Separator Attributes  
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes  
OP-UA16 - Solvent Degreasing Machine Attributes  
OP-UA17 - Distillation Unit Attributes  
OP-UA18 - Surface Coating Operations Attributes  
OP-UA19 - Wastewater Unit Attributes  
OP-UA20 - Asphalt Operations Attributes  
OP-UA21 - Grain Elevator Attributes  
OP-UA22 - Printing Attributes  
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes  
OP-UA25 - Synthetic Fiber Production Attributes  
OP-UA26 - Electroplating and Anodizing Unit Attributes  
OP-UA27 - Nitric Acid Manufacturing Attributes  
OP-UA28 - Polymer Manufacturing Attributes  
OP-UA29 - Glass Manufacturing Unit Attributes  
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semicheical Pulp Mill Attributes  
OP-UA31 - Lead Smelting Attributes  
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes  
OP-UA33 - Metallic Mineral Processing Plant Attributes  
OP-UA34 - Pharmaceutical Manufacturing  
OP-UA35 - Incinerator Attributes  
OP-UA36 - Steel Plant Unit Attributes  
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes  
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes  
OP-UA39 - Sterilization Source Attributes  
OP-UA40 - Ferroalloy Production Facility Attributes  
OP-UA41 - Dry Cleaning Facility Attributes  
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes  
OP-UA43 - Sulfuric Acid Production Attributes  
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes  
OP-UA45 - Surface Impoundment Attributes  
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes  
OP-UA47 - Ship Building and Ship Repair Unit Attributes  
OP-UA48 - Air Oxidation Unit Process Attributes  
OP-UA49 - Vacuum-Producing System Attributes  
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes  
OP-UA51 - Dryer/Kiln/Oven Attributes  
OP-UA52 - Closed Vent Systems and Control Devices  
OP-UA53 - Beryllium Processing Attributes  
OP-UA54 - Mercury Chlor-Alkali Cell Attributes  
OP-UA55 - Transfer System Attributes  
OP-UA56 - Vinyl Chloride Process Attributes  
OP-UA57 - Cleaning/Depainting Operation Attributes  
OP-UA58 - Treatment Process Attributes  
OP-UA59 - Coke By-Product Recovery Plant Attributes  
OP-UA60 - Chemical Manufacturing Process Unit Attributes  
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes  
OP-UA62 - Glycol Dehydration Unit Attributes  
OP-UA63 - Vegetable Oil Production Attributes